

**To:** COHEN, Deborra[Cohen.Deborra@epa.gov]  
**From:** Allen, HarryL  
**Sent:** Wed 8/19/2015 9:44:37 PM  
**Subject:** RE: Harry, pls read RE: Ag analysis for San Juan River due COB today

That'd be great - please do!

-----Original Message-----

**From:** COHEN, Deborra  
**Sent:** Wednesday, August 19, 2015 1:18 PM  
**To:** Allen, HarryL  
**Subject:** Harry, pls read RE: Ag analysis for San Juan River due COB today  
**Importance:** High

Harry, I've found an extremely knowledgeable USGS Physical Sciences Librarian in CO formerly a USGS hydrologist, project chief for water-quantity studies, field work (surface water, groundwater, and water quality) and, as needed, part of emergency response, time-critical research team. May I forward your email below in full to see what she can contribute (with special focus on portion directed to me but perhaps helpful with more)? Would be very helpful.

I could ask her not to share/discuss with others if that is of concern. She has offered assistance and is very familiar with the current Gold King issue.

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Deborra Cohen  
Director, Environmental Information Center / Library

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<http://www.epa.gov/region9/library>

U.S. EPA Region 9 Library / 75 Hawthorne St. / San Francisco, CA 94105

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-----Original Message-----

**From:** Allen, HarryL  
**Sent:** Wednesday, August 19, 2015 12:22 PM  
**To:** Montgomery, Michael  
**Cc:** Hashimoto, Janet; Hiatt, Gerald; Tenley, Clancy; Manzanilla, Enrique; Small, Matthew; Riley, Gary; Hillenbrand, John; Gill, Michael; Robberson, Bill; Rayman, Jamie; Vianu, Libby; COHEN, Deborra  
**Subject:** Ag analysis for San Juan River due COB today

Objectives:

- provide general sediment and water quality comparisons to livestock and Irrigation risk screening levels and pre-event conditions
- address concerns about Ferric Hydroxide complexes in suspended solids and depositional areas, floodplains etc.
- generally, present the risk message for farmers

Steps and who could do what...

Janet - it would be helpful if you could take the McElmo creek data and sort out the metals of concern. Send to me to look at.

Gerry - updating table - finished, thank you! Just focus on sediment concentration comparisons to screening levels. I have some stuff from ERT to share on that. Please share data with anyone on this list who could help. If time, look at that UT table...any insights

Mike M/Bill - please cover the 2 PM call with UT and others - see below "What we have" for where we are at today

Mike G - share Gerry's data table with Tech Support

Gary, John, Matt, Libby, Jamie - is there something we're missing? Other ideas? I'll share what we come up with for review around 330

Gary/John (and Deb!) - anything on trace metals in Ferric Hydroxide and mine drainage as it relates to this issue would be helpful. Also, interested in trace mineralogy in northern AZ, Manco Shale formation. For example Background Cd, Mg, V and Co would be helpful.

Harry - call experts, compile recommendations. 2pm coordination call with USDA and UW and EPA ERT. Will also check in with UNM.  
Final Draft recommendation - share with group.

What we have:

- estimations of the behavior of the plume generally. Current point of view is: Downstream of Four Corners, plume signature lost in noise of total and dissolved metal concentrations in Surface Water.
- estimations of wide area background concentrations in the San Juan - downstream of Four Corners. These are helpful but some metals, esp total Al are right at the upper end of background estimates.
- Risk comparisons for surface water - some atypical metals exceed agricultural screening levels set by Navajo Nation periodically and exceed Recreation screening levels in point-by-point comparisons. Cd, Mg, V and Co are confounding - some were detected at the source but Navajo is also V country as well as U country.
- Risk/screening level comparisons for sediment since plume impact to present (no background available yet) but so far these meet screening levels.
- background message from Ned on Ferric hydroxide - other experts.

-----Original Message-----

From: Allen, HarryL  
Sent: Tuesday, August 18, 2015 11:25 PM  
To: Montgomery, Michael  
Cc: Hashimoto, Janet; Hiatt, Gerald  
Subject: Re: R9 data and analysis for lower San Juan

We're working on it! BTW there is also a call with the Area Command about this. I will share the time and call in.

Here are the background statistics on some of the metals in Janet's data. Once I get the data from up stream we'll do trend analysis and population comparisons.

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From: Montgomery, Michael  
Sent: Tuesday, August 18, 2015 6:35 PM  
To: Allen, HarryL  
Cc: Black, Ned; Hiatt, Gerald; Hashimoto, Janet; Woo, Nancy; Manzanilla, Enrique  
Subject: R9 data and analysis for lower San Juan

Harry -

Do we have the data and analysis we have been working on in a package we can send to OW in the a.m. to get the ball rolling on a comprehensive multi region data presentation and analysis? Lmk. Thanks M

Sent from my iPhone